

Amendments to the Claims

Please amend the claims as follows:

Please cancel Claims 1-12.

13. (Add) A skull clamp for holding the head of a patient comprising:

a C-shaped frame have first and second legs adapted to reside on opposite sides of the head, the legs aligned along an axis which bisects the head;

5 a single side skull pin held by the first leg on a first side of the head, the single side skull pin oriented in alignment with an axis which, when in use, extends through the head of the patient and through the second leg of the C-shaped frame;

a rocker arm assembly held by the second leg, on a second side of the head, the rocker arm assembly supporting a pair of rocker arm skull pins in spaced relation; and

10 a pair of skull pin carrier assemblies held to the rocker arm assembly in spaced relation, each supporting a rocker arm skull pin, the single side skull pin and said pair of rocker arm skull pins adapted to securely hold the head of the patient, each rocker arm skull pin being oriented in non-alignment with the axis, each skull pin carrier assembly further including an indicator cap operatively contacting the respective rocker arm skull pin, each indicator cap being movable relative to the corresponding rocker arm skull pin along a 15 direction parallel to the orientation of the corresponding rocker arm skull pin in response to head engagement force applied to the corresponding rocker arm skull pin, thereby to provide a comparative indication of load distribution to said pair of rocker arm skull pins.

14. (Add) The skull clamp of claim 13 wherein each skull pin carrier assembly further comprises:

a hollow adjustment screw removably received within one end of the rocker arm assembly; and

5 the indicator cap movable relative to the adjustment screw to provide a visible indication of the engagement force applied to the respective skull pin by the head of the patient.

15. (Add) The skull clamp of claim 14 wherein each pin carrier assembly further comprises:

a piston residing within the hollow adjustment screw, the piston having at a first end thereof an enlarged head residing in contact with the respective rocker arm skull pin, the indicator cap held to a second opposite end of the piston.

16. (Add) The skull clamp of claim 15 wherein each of the pin carrier assemblies further comprises:

a spring operatively associated with the adjustment screw and the piston, the spring biased so as to hold the indicator cap in a desired position relative to the outer end of 5 the pin carrier assembly.

17. (Add) The skull clamp of claim 16 wherein each spring holds the respective indicator cap within a recess.

18. (Add) The skull clamp of claim 13 wherein each of the pin carrier assemblies resides within a correspondingly shaped bore formed in an end of the rocker arm assembly.

19. (Add) The skull clamp of claim 18 wherein each pin carrier assembly is threadably received within the corresponding complementarily threaded bore in the rocker arm assembly, thereby to permit adjustment of the relative positions of the pin carrier assemblies and their corresponding skull pins relative to the rocker arm assembly.

20. (Add) A skull clamp for rigidly holding the skull of the patient during surgery comprising:

a C-shaped frame to partially encircle the head of the patient, the frame having first and second ends adapted to be located on opposite sides of the skull of the patient;

a pin assembly located at a first end of the frame and oriented in alignment with an axis which, when in use, extends through the head of the patient and through the second leg of the C-shaped frame, said assembly holding a single skull pin and being adjustable relative to the first end of the frame to enable an operator to selectively determine the force applied to the skull of the patient by the corresponding single skull pin; and

10 a pair of spaced skull pins adapted to engage and hold the skull of the patient
opposite the single skull pin, said pair of spaced skull pins located at a second end of the
frame, each of said pair of spaced skull pins operatively contacting an indicator, each of the
indicators being movable in non-alignment with the axis and relative to the respective spaced
skull pin along a direction parallel to the orientation of the respective spaced skull pin in
15 response to the engagement force applied by the skull of the patient to the respective spaced
skull pin, thereby to provide an indication of the load distribution of the engagement forces on
said pair of spaced skull pins.

21. (Add) The skull clamp of claim 20 wherein said pair of skull pins are mounted in spaced relation on a rocker arm located at the second end of the frame, the first and second ends of the frame aligned along an axis which bisects the skull of the patient, the rocker arm being rotatable relative to the axis to facilitate placement of said pair of skull pins in desired positions relative to the skull of the patient.

22. (Add) The skull clamp of claim 21 wherein each of said pair of skull pins resides within a bore located at an end of the rocker arm, and further comprising:

a pair of pin carrier assemblies, each pin carrier assembly held within the bore and holding the respective indicator in operative contact with the respective skull pin.

23. (Add) The skull clamp of claim 22 wherein each of the two pin carrier assemblies further comprises:

a spring biasing the respective indicator in a desired position relative to the frame, so that the indicator moves relative to the frame in response to force on the skull pin
5 only after the force of the spring is overcome.

24. (Add) The skull clamp of claim 23 wherein each indicator includes markings to facilitate visual detection of the movement of the indicator relative to the frame, thereby to facilitate comparison of the load distribution between said pair of spaced skull pins.

25. (Add) A skull fixation device comprising:

a frame adapted to partially encircle the skull of a patient, the frame having at least one leg which is adapted to be located adjacent the skull when the fixation device is in use, the at least one leg being aligned substantially perpendicular to an axis which extends 5 through the skull; and

a pair of spaced skull pins mounted in spaced relation on a swivel bracket located at said at least one leg of the frame, the pair of spaced skull pins being spaced from the axis and adapted to engage and hold the skull of the patient, each of the pair of spaced skull pins operatively contacting a respective indicator, the indicators being spaced from the 10 axis and movable relative to the swivel bracket in response to the force applied by the skull to the respective skull pin, thereby to indicate the load distribution of the forces on the spaced skull pins,

wherein the swivel bracket is rotatable about the axis to facilitate placement of the pair of spaced skull pins in desired positions relative to the skull, and the swivel bracket 15 remains a fixed distance, along the axis, from said at least one leg of the frame.

26. (Add) The skull fixation device of claim 25 and further comprising

another leg forming part of the frame, and a third pin mounted to said another leg and oriented along the axis.